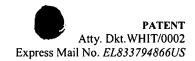
CLAIMS:

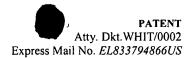
I claim:

A root growth barrier, comprising a layer of a root-tip-trapping material bonded to a layer of a root-impenetrable material.

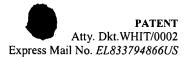
- 2. The barrier of claim 1, wherein the root-impenetrable material is water-impenetrable.
- 3. The barrier of claim 1, wherein the root-tip-trapping material comprises greater than 10 root-tip-trapping elements per square inch.
- 4. The barrier of claim 1, wherein the root-tip-trapping material is a porous fabric.
- 5. The barrier of claim 4, wherein the porous fabric has a weight between 2 and 10 ounces per square yard.
- 6. The barrier of claim 5, wherein the porous fabric has a weight between 4 and 6 ounces per square yard.
- 7. The barrier of claim 4, wherein the porous fabric has openings between 1/16 and ¼ inch.
- 8. The barrier of claim-4, wherein the porous fabric is a spun bonded, needle punched fabric.
- 9. The barrier of claim 8, wherein the porous fabric is selected from polyester, polypropylene or other olefin fiber.
- 10. The barrier of claim 4, wherein the porque fabric is a woven or knitted fabric.
- 11. The barrier of claim 10, wherein the porous fabric is degradable.



- 12. The barrier of claim 11, wherein the porous fabric is cotton.
- 13. The barrier of claim 4, wherein the porous fabric is opaque.
- 14. The barrier of claim 13, wherein the porous fabric is black or gray.
- 15. The barrier of claim 1, wherein the root-tip-trapping material is bonded onto the root-impenetrable material by a method selected from gluing, laminating and combinations thereof.
- 16. The barrier of claim 1, wherein the root-impenetrable material is comprised of a plurality of layers.
- 17. The barrier of claim 1, wherein the root-impenetrable material is reflective.
- 18. The barrier of claim 1, wherein the root-impenetrable material is a polymer sheet.
- 19. The barrier of claim 1, wherein the root-impenetrable material is selected from polyethylene and polypropylene.
- 20. The barrier of claim 1, wherein the root-impenetrable material is metal.
- 21. The barrier of claim 1, wherein the root-impenetrable material is a metal foil.
- 22. The barrier of claim 1, wherein the root-impenetrable material is aluminum foil.
- 23. The barrier of claim 1, wherein the root-impenetrable layer is pervious to UV radiation.
- 24. The barrier of claim 18, wherein root-impenetrable material is white.

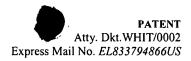


- 25. The barrier of claim 1, wherein the root-impenetrable layer has a thickness between 2 and 10 mils.
- 26. The barrier of claim 1, wherein the root-impenetrable layer has a thickness between 3 and 5 mils.
- 27. The barrier of claim 1, wherein the root-impenetrable material is biodegradable.
- 28. The barrier of claim 27, wherein the biodegradable material is selected from wood, fiber, starch, polyhydroxyalkanoates, polycaprolactone, polylactide aliphatic copolymer, polylactide, aliphatic polyester, an aliphatic-aromatic copolymer, and combinations thereof.
- 29. An apparatus, comprising:a root-impenetrable container for growing a plant; anda root-tip-trapping material bonded to an inner wall of the container.
- 30. The apparatus of claim 29, wherein the container is formed into a shape selected from cylinders, squares, rectangles, cubes, blocks, hexagons, octagons, ovals, pentagons, triangles and circles.
- 31. The apparatus of claim 29, wherein the container has a diameter between 2 and 96 inches.
- 32. The apparatus of claim 29, wherein the container has a diameter between 5 and 60 inches.
- 33. The apparatus of claim 29, wherein the root-tip-trapping material is a spun bonded, needle punched fabric.
- 34. The apparatus of claim 33, wherein the fabric has a density between 2 and 10 ounces per square yard.



- 35. The apparatus of claim 33, wherein the fabric has a density between 4 and 6 ounces per square yard.
- 36. The apparatus of claim 29, wherein the root-impenetrable container comprises polyethylene and the root-tip-trapping material comprises spun bonded fabric.
- 37. The apparatus of claim 36, wherein the polyethylene has a thickness between 2 and 10 mils.
- 38. The apparatus of claim 36, wherein the polyethylene has a thickness between 3 and 5 mils.
- 39. The apparatus of claim 36, wherein the polyethylene contains additives.
- 40. The apparatus of claim 39, wherein the additives comprise UV inhibitors.
- 41. The apparatus of claim 29, wherein the fabric is black or grey.
- 42. The apparatus of claim 29, wherein the root-tip-trapping material is a woven or knitted fabric.
- 43. The apparatus of claim 29, wherein the container is assembled by sewing or stapling.
- 44. The apparatus of claim 33, wherein the container is a grow-bag or in-ground container.
- 45. The apparatus of claim 33, wherein the container is a production pot in pot-in-pot production.
- 46. A method of growing a plant in a pot comprising the steps of:
 disposing a bilayer root growth barrier consisting essentially of a root-tip-trapping inner

material bonded to a root-impenetrable material;



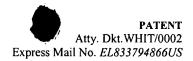
disposing a growth medium adjacent to the root growth barrier; and adding a plant to the growth medium.

- 47. A method of growing a plant in-ground, comprising the steps of:

 placing growth medium in a container comprising a bilayer consisting essentially of a biodegradable root-impenetrable outer material bonded to an inner root-penetrable material; and adding a plant to the growth medium.
- 48. A root growth barrier, consisting essentially of:

 a layer of a root-tip-trapping material bonded to a layer of a root-impenetrable material.
- 49. A root growth barrier comprising:

 a polymer sheet having a surface bonded to a porous fabric.
- 50. The barrier of claim 49, wherein the porous fabric has a weight between 4 and 6 ounces per square vard.
- 51. The barrier of claim 49, wherein the porous fabric has openings between 1/16 and ¼ of an inch.
- 52. The barrier of claim 49, wherein the porous fabric is selected from spun bonded and needle punched fabric, woven fabric, and knitted fabric.
- 53. The barrier of claim 49, wherein the porous fabric is selected from polyester, polypropylene and cotton.
- 54. The barrier of claim 49, wherein the polymer sheet is white and the porous fabric is black.
- 55. The barrier of claim 49, wherein the porous fabric is bonded onto the polyethylene sheet by a method selected from gluing, laminating and combinations thereof.



- 56. The barrier of claim 49, wherein the polyethylene sheet has a thickness between 2 and 10 mils.
- 57. A root growth barrier, comprising:
 - a polyethylene sheet; and
- a porous fabric layer bonded to a surface of the polyethylene sheet, wherein the porous fabric layer is selected from spun-bonded and needle punched fabric, woven fabric, and knitted fabric.
- 58. The barrier of claim 57, wherein the polyethylene sheet is white and the porous fabric layer is black.
- 59. The barrier of claim 57, wherein the porous fabric layer is bonded onto the polyethylene sheet by a method selected from gluing, laminating and combinations thereof.
- 60. The barrier of claim 57, wherein the polyethylene sheet has a thickness between 2 and 10 mils.
- 61. The barrier of claim 57, wherein the porous fabric layer has a weight between 2 and 10 ounces per square yard.
- 62. The barrier of claim 57, wherein the porous fabric layer has a weight between 4 and 6 ounces per square yard.
- 63. The barrier of claim 1, wherein the root-tip-trapping layer comprises a plurality of strata.
- 64. The barrier of plaim 25, wherein the root-impenetrable material is water-impenetrable.
- 65. The barrier of claim 1, wherein the root-tip-trapping material comprises greater than 100 root-tip-trapping elements per square inch.